IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 09/930,827	§	Examiner: Grey, Christopher P.
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Inventor(s):	§	Atty. Dkt. No: 6057-60300
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APPEAL BRIEF

Sir/Madam:

Further to the Notice of Appeal filed December 31, 2008, Appellant presents this Appeal Brief. **This Appeal Brief is being filed with a one-month extension of time.** Appellant respectfully requests that this appeal be considered by the Board of Patent Appeals and Interferences. Appellant notes that this brief is being submitted under the newly proposed BPAI rules.

STATEMENT OF REAL PARTY IN INTEREST

The present application is owned by Gallitzin Allegheny LLC; an assignment of the present application to the owner is recorded at Reel 015271, Frame 0226.

STATEMENT OF RELATED CASES

The following cases are either related to the present case or have similar subject matter. Any final decision issued by the Board or a Court, and any significant interlocutory decision issued by the Board or a Court, is included in the Related Cases Appendix of this Appeal Brief.

1. U.S. Patent Number 7,020,472
2. U.S. Patent Number 7,058,040
3. Co-pending U.S. Patent Application Serial Number 11/331,787

JURISDICTIONAL STATEMENT

The Board of Patent Appeals and Interferences has jurisdiction of this appeal under 35 U.S.C. § 134(a){ TA \l "35 U.S.C. § 134(a)" \s "35 U.S.C. § 134(a)" \c 2 }. A Final Office Action was mailed June 13, 2008{ TA \l "Final Office Action mailed June 13, 2008" \s "Final Office Action mailed June 13, 2008" \c 8 }. An amendment and a Request for Continued Examination were filed September 15, 2008. The Office Action{ TA \l "Office Action mailed October 1, 2008" \s "Office Action mailed October 1, 2008" \c 8 } setting out the rejections on appeal was mailed October 1, 2008. A Notice of Appeal was filed on December 31, 2008. A Pre-Appeal Request for Review{ TA \l "Pre-Appeal Request for Review" \s "Pre-Appeal Request for Review" \c 8 } was filed concurrently with the Notice of Appeal on December 31, 2008. A Panel Decision{ TA \l "Panel Decision" \s "Panel Decision" \c 8 } was mailed March 17, 2009 setting forth a one-month period for filing of an Appeal Brief under 37 C.F.R § 41.37{ TA \l "37 C.F.R § 41.37" \s "37 C.F.R § 41.37" \c 4 }. The time for filing the Appeal Brief expired on April 17, 2009. The Appeal Brief and a request for a one-month extension of time are being filed on May xxx 2009.

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TABLE OF AUTHORITIES

STATUS OF AMENDMENTS

No amendment to the claims has been filed subsequent to the rejection in the Office Action{ TA \l "Office Action mailed October 1, 2008" \s "Office Action mailed October 1, 2008" \c 8 } of October 1, 2008.

GROUNDS OF REJECTION TO BE REVIEWED

1. Rejection of claims 1-4, 7, 15, and 24-27 under 35 U.S.C. § 103(a){ TA \l "35 U.S.C. § 103" \s "35 U.S.C. § 103(a)" \c 2 } as being unpatentable over Kobylinski{ TA \l "Kobylinski" \s "Kobylinski" \c 10 } et al. (U.S. Patent No. 7,242,938), Scholefield{ TA \l "Scholefield" \s "Scholefield" \c 10 } (U.S. Patent No. 5,752,193), Gorsuch (U.S. Patent No. 6,526,034), and Himmel{ TA \l "Himmel" \s "Himmel" \c 10 } (U.S. Patent No. 6,742,052).

2. Rejection of claims 16, 17, 19, 23, 30, and 32 under 35 U.S.C. § 103(a){ TA \s "35 U.S.C. § 103(a)" } as being unpatentable over Scholefield{ TA \s "Scholefield" }, Gorsuch{ TA \l "Gorsuch" \s "Gorsuch" \c 10 }, and Himmel{ TA \s "Himmel" }.

3. Rejection of claims 18 and 21 under 35 U.S.C. § 103(a){ TA \s "35 U.S.C. § 103(a)" } as being unpatentable over Scholefield{ TA \s "Scholefield" }, Gorsuch{ TA \s "Gorsuch" }, Himmel{ TA \s "Himmel" }, and Rosener{ TA \l "Rosener" \s "Rosener" \c 10 } (U.S. Patent Application Publication No. 2002/0028655).

4. Rejection of claims 28 and 29 under 35 U.S.C. § 103(a){ TA \s "35 U.S.C. § 103(a)" } as being unpatentable over Kobylinski{ TA \s "Kobylinski" }, Gorsuch{ TA \s "Gorsuch" }, and Himmel{ TA \s "Himmel" }.

STATEMENT OF FACTS

The Examiner rejected pending claims 1-4, 7, 15, and 24-27 under { TA \l "35 U.S.C. § 103" \s "35 U.S.C. § 103" \c 2 }35 U.S.C. § 103 as being unpatentable over Kobylinski{ TA \s "Kobylinski" }, Scholefield{ TA \s "Scholefield" }, Gorsuch{ TA \s "Gorsuch" }, and Himmel{ TA \s "Himmel" }. *See* Office Action{ TA \l "Office Action mailed October 1, 2008" \s "Office Action mailed October 1, 2008" \c 8 } dated October 1, 2008 at 2. Appellant traversed these rejections in a pre-appeal conference request. *See* Pre-Appeal Brief Request for Review{ TA \l "Pre-Appeal Request for Review" \s "Pre-Appeal Request for Review" \c 8 } filed on December 31, 2008 ("Pre-Appeal Request"). The Examiner rejected pending claims 16, 17, 19, 23, 30, and 32 under 35 U.S.C. § 103{ TA \s "35 U.S.C. § 103" } as being unpatentable over Scholefield{ TA \s "Scholefield" }, Gorsuch{ TA \s "Gorsuch" }, and Himmel{ TA \s "Himmel" }. *See* Office Action{ TA \l "Office Action mailed October 1, 2008" \s "Office Action mailed October 1, 2008" \c 8 } dated October 1, 2008 at 9. Appellant traversed these rejections in the Pre-Appeal Request. *See* Pre-Appeal Request{ TA \s "Pre-Appeal Request for Review" }. The Examiner rejected pending claims 16, 28 and 29 under 35 U.S.C. § 103{ TA \s "35 U.S.C. § 103" } as being unpatentable over Kobylinski{ TA \s "Kobylinski" }, Gorsuch{ TA \s "Gorsuch" }, and Himmel{ TA \s "Himmel" }. *See* Office Action{ TA \l "Office Action mailed October 1, 2008" \s "Office Action mailed October 1, 2008" \c 8 }

dated October 1, 2008 at 16. Appellant traversed these rejections in the Pre-Appeal Request. *See* Pre-Appeal Request{ TA \s "Pre-Appeal Request for Review" }.

Kobylinski

Kobylinski{ TA \s "Kobylinski" } is directed to "a system and method to improve the quality of the handoff decision by allowing the mobile station to synchronize candidate base station transmissions for identity verification purposes." *See* Kobylinski{ TA \s "Kobylinski" } at 2: 29-31. Kobylinksi discloses "the mobile station performs a received signal strength measurement on candidate base station channels." *See* Kobylinski{ TA \s "Kobylinski" } at 2: 65-67.

Scholefield

Scholefield{ TA \s "Scholefield" } is directed to a "system for allocating one or more subchannels based on priority of user data." *See* Scholefield{ TA \s "Scholefield" } at 2:59-61. Scholefield{ TA \s "Scholefield" } discloses "Scheduler 117 receives the access request and, based upon channel/activity factors such as the priority level, number of other pending requests of similar or higher priority, size of the SDU(s), authentication results, a determination is made

whether to allocate traffic subchannel(s)." *See* Scholefield{ TA \s "Scholefield" } at 5: 28-33.

Gorsuch

Gorsuch{ TA \s "Gorsuch" } is directed to "a technique for communicating with a local area network (LAN) via a wireless connection" that "determines whether a first short-range, high-speed, wireless communication path is available and connects to the LAN using a longer range, lower speed wireless communication path *if* the short-range, high-speed wireless communication path is not available." *See* Gorsuch{ TA \s "Gorsuch" } Abstract (emphasis added). Gorsuch{ TA \s "Gorsuch" } further notes that the "present invention" "is a single device which connects directly to a W-LAN using a protocol such as IEEE 802.11 *when such a connection is possible*" and that "automatically reverts to connecting to the long range network *only when out of range of the W-LAN base stations*." *Id* at 2:55-59 (emphasis added).

Himmel

Himmel{ TA \s "Himmel" } is directed to "a mobile or desktop computer having a system bus that is exposed externally using a wireless transceiver so that input and output devices within proximity of the computer can be configured

for immediate use." *See* Himmel{ TA \s "Himmel" } Abstract. Himmel{ TA \s "Himmel" } also discloses "[a] parallel communication channel" "using 8 transceivers" "that are set to transmit and receive signals at 8 different frequencies." *Id* at 8: 36-39. Still further, Himmel{ TA \s "Himmel" } discloses that "parallel communications or signals are transmitted using a separate frequency for each of the parallel channels required," and that, "[f]or example, eight bit parallel communications would require that each of the eight bits be transmitted at the same time or clock pulse over eight different frequencies." *Id* 3: 33-38. Himmel{ TA \s "Himmel" } further discloses "[i]n order to achieve true multi-channel communications with multiple peripherals, each of the transceivers, such as the 8 transceivers facilitating the 8-bit communication of FIG. 8B, must transmit at a different frequency." *Id* 11: 17-17

Claims 1, 16, 28, and 30

Claim 1 recites "bonding a short-range radio channel with the allocated cellular frequency channels thus increasing available bandwidth for data communication between the mobile station and the base station." *See* Response to Final Office Action{ TA \l "Response to Final Office Action filed September 15, 2008" \s "Final Office Action mailed June 13, 2008" \c 8 } filed

September 15, 2008 at 2 ("Supplemental Response"). Claim 1 also recites "transmitting data to the base station, in parallel, over the bonded short-range radio channel and the allocated cellular frequency channels." *Id.*

The Examiner previously asserted that the above-quoted claim language could refer to alternately transmitting data on the "short-range radio channel" and the "allocated cellular frequency channels" since the Examiner considered the different channels to be "combined/bonded." *See* the Final Office Action{ TA \l "Final Office Action mailed June 13, 2008" \s "Final Office Action mailed June 13, 2008" \c 8 } dated June 13, 2008 at 4. Now the Examiner cites Gorsuch{ TA \s "Gorsuch" } and Himmel{ TA \s "Himmel" } as teaching this combination of features. *See* Office Action{ TA \l "Office Action mailed October 1, 2008" \s "Office Action mailed October 1, 2008" \c 8 } dated October 1, 2008 at 4.

Appellant disagreed with the Examiner's rejections of claims 1, 16, 28, and 30. *See* the Pre-Appeal Request at 2. In the Pre-Appeal Request{ TA \s "Pre-Appeal Request for Review" }, Appellant argued that "Gorsuch{ TA \s "Gorsuch" } is disclosing a system that uses only one transceiver or the other, and not both at any given time."

Id at 3. Appellant further pointed out to the Examiner that "in FIG. 6 of Gorsuch{ TA \s "Gorsuch" }, the CDMA pathway and the WLAN pathway are mutually exclusive." *Id.* The Appellant further argued that "Gorsuch{ TA \s "Gorsuch" } therefore is NOT disclosing or suggesting 'bonding' of the CDMA channels ('allocated cellular frequency channels') and the WLAN channels ('short-range radio channel')." *Id.* The Appellant further pointed out that "[t]he Examiner appears to acknowledge as much by admitting that the combined teachings of Kobylinski{ TA \s "Kobylinski" }, Scholefield{ TA \s "Scholefield" }, and Gorsuch{ TA \s "Gorsuch" } do not specifically disclose the 'in parallel' feature of the pending claims." *Id.* Appellant then noted that "[a]s such, Gorsuch{ TA \s "Gorsuch" } cannot be said to teach or suggest the 'bonding' recited in Applicant's claims." *Id.*

With regard to Himmel{ TA \s "Himmel" }, Appellant further argued that "Himmel{ TA \s "Himmel" } discloses '[a] parallel communication channel' 'using 8 transceivers' 'that are set to transmit and receive signals at 8 different frequencies.'" *See* Office Action{ TA \l "Office Action mailed October 1, 2008" \s "Office Action mailed October 1, 2008" \c 8 } of October 1, 2008 at 4. Appellant also argued that "Himmel{ TA \s "Himmel" } also discloses that 'parallel communications or signals are transmitted using a separate

frequency for each of the parallel channels required.'" *Id.* Appellant further argued "[f]or example, eight bit parallel communications would require that each of the eight bits be transmitted at the same time or clock pulse over eight different frequencies." *Id.* Appellant then argued that "this type of communication is no different than a parallel bus on a circuit board, with the exception that each channel in Himmel{ TA \s "Himmel" } uses a different channel frequency." *Id.* Appellant further argued that "although Himmel{ TA \s "Himmel" } teaches parallel communication, Himmel{ TA \s "Himmel" } does not teach or suggest bonding disparate types of channels, much less the types of channels recited in the pending claims (cellular frequency channels and short-range radio channels)." *Id.*

Appellant finally argued that there is not adequate motivation to modify Gorsuch{ TA \s "Gorsuch" } in view of Himmel{ TA \s "Himmel" }. *See* Office Action{ TA \l "Office Action mailed October 1, 2008" \s "Office Action mailed October 1, 2008" \c 8 } of October 1, 2008 at 4. Appellant argued that "Gorsuch{ TA \s "Gorsuch" } discloses having the 'CDMA transceiver 140' to connect to the local area network 'when out of range of the W-LAN base stations.'" Appellant further argued "that the WLAN detection circuit 200 [of Gorsuch{ TA \s "Gorsuch" }] preferentially selects the WLAN path when a WLAN signal is

present." *Id.* It follows, Appellant argued, that "the CDMA channels in Gorsuch{ TA \s "Gorsuch" } are backups for the WLAN channels." *Id*. Appellant concluded that "[i]t is unclear why one of skill in the art would have been motivated to modify Gorsuch{ TA \s "Gorsuch" } in view of Himmel{ TA \s "Himmel" } to transmit the CDMA and WLAN channels at the same time when there is no apparent need to do so in the context of Gorsuch{ TA \s "Gorsuch" }." *Id*.

Claim 2

Claim 2 depends from claim 1. *See* Supplemental Response { TA \l "Response to Final Office Action filed September 15, 2008" \s "Final Office Action mailed June 13, 2008" \c 8 }at 2. Claim 2 recites "wherein said transmitting includes the mobile device transmitting, at a given point in time, a first portion of data on the allocated cellular frequency channels and a second portion of the data on the short-range radio channel." *Id.* The Examiner rejected claim 2 by asserting "any point in time is a given point in time." *See* Office Action{ TA \l "Office Action mailed October 1, 2008" \s "Office Action mailed October 1, 2008" \c 8 } dated October 1, 2008 at 5. The Examiner further asserted that Gorsuch{ TA \s "Gorsuch" } teaches the limitation because "the data can be transmitted using the short range transceiver, and when the short range is no longer available, data is transmitted using the long range, thus data is transmitted in portions using different transceivers." *Id.* at 5.

Claim 29

Claim 29 depends from claim 28. *See* Supplemental Response { TA \l "Response to Final Office Action filed September 15, 2008" \s "Final Office Action mailed June 13, 2008" \c 8 }at 5. Claim 28 recites "the long-range transceiver and a short-range transceiver are further configured to concurrently transmit data

to the base station over both the one or more bonded short-range radio channels and the one or more allocated cellular frequency channels." *Id.* The Examiner acknowledged that "[t]he combined teachings of Kobylinski{ TA \s "Kobylinski" }, Gorsuch{ TA \s "Gorsuch" } and Himmel{ TA \s "Himmel" } do not specifically disclose" the limitation of claim 29. *See* Office Action{ TA \l "Office Action mailed October 1, 2008" \s "Office Action mailed October 1, 2008" \c 8 } dated October 1, 2008 at page 18. The Examiner went on to assert that Himmel teaches the limitation because "up to eight different transceivers are used, each broadcasting on a different frequency, where the frequencies determine long or short range." *Id* at page 18.

ARGUMENT

Claims 1, 16, 28, and 30:

Appellant traverses the rejection of claim 1 for at least the reasons set forth below. Claims 3-4, 7, 15-19, 21, 23-28, and 30-32 stand or fall with representative claim 1.

The combination of references proposed by the Examiner does not teach or suggest each and every limitation set forth in claim 1. Thus, the Examiner has failed to establish a *prima facie* case of obviousness.

As previously argued in the Pre-Appeal Request{ TA \s "Pre-Appeal Request

for Review" }, Gorsuch{ TA \s "Gorsuch" } discloses a system that ***uses*** only one transceiver or the other, and not both at any given time. As shown in FIG. 6 of Gorsuch{ TA \s "Gorsuch" }, the CDMA pathway and the WLAN pathway are mutually exclusive. *See* Pre-appeal Request{ TA \s "Pre-Appeal Request for Review" } at page 3. Thus, Gorsuch{ TA \s "Gorsuch" } cannot teach or suggest the "bonding" recited in Appellant's claims.

As further argued in the Pre-Appeal Request{ TA \s "Pre-Appeal Request for Review" }, although Himmel{ TA \s "Himmel" } does teach parallel transmission via a wireless interface, Applicant submits this disclosure does not render claim 1 obvious in view of the other cited references. Himmel{ TA \s "Himmel" } merely teaches that wireless data may be communicated in parallel, in much the same way that data may be communicated in parallel on a circuit board, with the exception that each channel in Himmel{ TA \s "Himmel" } uses a different channel frequency so that there is no interference between channels. Himmel{ TA \s "Himmel" }, however, **does not teach or suggest** bonding disparate types of channels, much less the types of channels recited in the pending claims (cellular frequency channels and short-range radio channels). There is absolutely no suggestion in Himmel{ TA \s "Himmel" } of the different parallel channels corresponding to different protocols. Furthermore, the Examiner does not

adequately explain why one of ordinary skill in the art would be motivated by Himmel{ TA \s "Himmel" } to modify a system (Gorsuch{ TA \s "Gorsuch" }) that transmits over **either** a CDMA pathway or a LAN pathway, to transmit over both pathways in parallel. At best, Himmel{ TA \s "Himmel" } might suggest that the data transmitted over whatever pathway in Gorsuch{ TA \s "Gorsuch" } is currently active (CDMA or W-LAN) be transmitted in parallel (although Gorsuch{ TA \s "Gorsuch" } already teaches the CDMA pathway uses multiple channels at 10:8-11), but Himmel{ TA \s "Himmel" } does not suggest the "bonding" recited in claim 1 that improves the bandwidth of the system.

Since neither Gorsuch{ TA \s "Gorsuch" } nor Himmel{ TA \s "Himmel" } discloses the bonding of channels as recited in the pending claims, the proposed combination of references does not include each and every feature of the claims. Accordingly, the Examiner has failed to establish a *prima facie* case of obviousness.

Further, as previously argued, Appellant submits there is a lack of motivation to modify Gorsuch{ TA \s "Gorsuch" } in view of Himmel{ TA \s "Himmel" } in the manner suggested by the Examiner. Gorsuch{ TA \s "Gorsuch" } discloses switches 211a and 211b making the system connect ***either*** the CDMA transceiver 140 ***OR*** the 802.11 transceiver 240 between

the interface 120 and the antenna 150 at any given time. *See* Gorsuch{ TA \s "Gorsuch" } at Fig. 6. Gorsuch{ TA \s "Gorsuch" } also discloses that the "W-LAN detection circuit 200" preferentially selects the W-LAN path "if a W-LAN is detected." *Id* at 10: 44-54. Thus, it is unclear why one of skill in the art would have been motivated to modify Gorsuch{ TA \s "Gorsuch" } in view of Himmel{ TA \s "Himmel" } to transmit the CDMA and WLAN channels at the same time when there is no apparent need to do so in the context of Gorsuch{ TA \s "Gorsuch" }, since the CDMA channels are merely a backup pathway in the context of that reference. *See* Pre-appeal Request{ TA \s "Pre-Appeal Request for Review" } at page 4. The Examiner has not adequately stated a motivation for taking the backup CDMA pathway in Gorsuch{ TA \s "Gorsuch" } and using that pathway in parallel with the primary pathway. No cited reference teaches or suggests this, and the Examiner has not adequately demonstrated some teaching or suggestion known in the art that would suggest such a modification. (As noted above, the fact that parallel wireless transmission was known (e.g., Himmel{ TA \s "Himmel" }) might suggest parallel transmission via the active pathway in Gorsuch{ TA \s "Gorsuch" }, but says nothing about the "bonding" recited in claim 1.)

For at least the reasons stated above, the Examiner's rejection of claim

1 (and its dependent claims) is believed to be in error. The rejections of the other claims in this group are believed to be in error for at least reasons similar to those provided for claim 1.

Claim 2:

Claims 2 depends from claim 1. Accordingly, the rejection of claim 2 is in error for at least the reasons highlighted above with regard to claim 1. Additionally, claim 2 is believed to be patentably distinct over the cited references for at least the reasons set forth below.

As argued for the first time, Appellant submits that none of the references teaches or suggests "transmitting includes the mobile device transmitting, at a given point in time, a first portion of data on the allocated cellular frequency channels and a second portion of the data on the short-range radio channel," as recited in claim 2. As noted above, the Examiner asserts "any point in time is a given point in time." *See* Office Action{ TA \l "Office Action mailed October 1, 2008" \s "Office Action mailed October 1, 2008" \c 8 } dated October 1, 2008 at 5. The Examiner goes on to assert that Gorsuch{ TA \s "Gorsuch" } teaches the limitation because "the data can be transmitted using the short range transceiver, and when the short range is no longer available, data is transmitted using the long range, thus data is transmitted in portions

using different transceivers." *Id* at page 5. Appellant respectfully disagrees with the characterization of Gorsuch{ TA \s "Gorsuch" } and the Examiner's interpretation of what it means when two events occur "at a given point in time."

Appellant does not dispute that a given point in time can be any point in time. However, the Examiner appears to be suggesting that the transmitting of the first portion of data, and the transmitting of the second portion of data recited in claim 2 are anticipated under a scenario in which they are each performed at two different points in time. To the contrary, claim 2 requires that the "mobile device transmit[], at a given point in time, a first portion of data on the allocated cellular frequency channels and a second portion of the data on the short-range radio channel." Appellant submits that claim 2 specifies that the first portion and the second portion of the data be transmitted on their respective channels at the *same* "given" point in time. From the above discussion regarding claim 1, Gorsuch{ TA \s "Gorsuch" } is not capable of this type of operation. Accordingly, Gorsuch{ TA \s "Gorsuch" } does not teach or suggest the limitations recited in claim 2.

For at least the above stated reasons, Appellant submits that the rejection of claim 2 is in error and requests reversal of the rejection.

Claim 29

Claims 29 depends from claim 28. Accordingly, the rejection of claim 29 is in error for at least the reasons highlighted above with regard to claim 1. Additionally, claim 29 is believed to be patentably distinct over the cited references for at least the reasons set forth below.

As argued for the first time, Appellant submits that none of the references teaches or suggests "the long-range transceiver and a short-range transceiver are further configured to concurrently transmit data to the base station over both the one or more bonded short-range radio channels and the one or more allocated cellular frequency channels."

As noted above, the Examiner acknowledges that "[t]he combined teachings of Kobylinski{ TA \s "Kobylinski" }, Gorsuch{ TA \s "Gorsuch" } and Himmel{ TA \s "Himmel" } do not specifically disclose" the limitation of claim 29. *See* Office Action{ TA \l "Office Action mailed October 1, 2008" \s "Office Action mailed October 1, 2008" \c 8 } dated October 1, 2008 at 18. The Examiner goes on to assert that Himmel{ TA \s "Himmel" } teaches the limitation because "up to eight different transceivers are used, each broadcasting on a different frequency, where the frequencies determine long or short range." *Id* at page 18. Appellant respectfully disagrees with the Examiner's characterization of Himmel{ TA \s "Himmel" }. Appellant submits the frequencies do not determine

long or short range. As described further below, in Himmel{ TA \s "Himmel" }, the frequencies are used for channel separation.

Specifically, as discussed above in regard to claim 2, Gorsuch{ TA \s "Gorsuch" } can only transmit data using one channel or the other at a given point in time. Further as discussed above in regard to claim 1, Himmel{ TA \s "Himmel" } merely teaches a wireless parallel interface that uses different frequencies for each channel, and not a different type of channel. Further, Appellant respectfully submits the Examiner's technical characterization of the reason different frequencies are used for each channel in Himmel{ TA \s "Himmel" } is in error. In Himmel{ TA \s "Himmel" }, the wireless peripheral device that is using the wireless interface is, by definition, at a given distance from the computer, and all 8 parallel communication lines of the wireless interface would thus be that same distance from the computer. Himmel{ TA \s "Himmel" } discloses the different channels must use different frequencies and transmitted at the same time. *See* Himmel{ TA \s "Himmel" } at 8: 36-44. As noted above, Himmel{ TA \s "Himmel" } further discloses that to have "true multi-channel communications with multiple peripherals, each of the transceivers, such as the 8 transceivers facilitating the 8-bit communication of FIG. 8B, must transmit at a different frequency" otherwise all the channels would blend together if they are transmitting in

parallel (i.e., at the same time) using the same frequency. Appellant further submits that nowhere does Himmel{ TA \s "Himmel" } teach or suggest that the parallel transmission uses different protocols; only different frequencies.

Accordingly, Appellant submits Himmel{ TA \s "Himmel" } does not teach or even fairly suggest the limitations of claim 29. For at least the above stated reasons, Appellant submits that the rejection of claim 29 is in error and requests reversal of the rejection.

CLAIMS APPENDIX

The following lists claims 1-4, 7, 15-19, 21, and 23-32, incorporating entered amendments, as on appeal.

1. (Rejected) A method, comprising:
   a mobile device sniffing for available cellular frequency channels;
   the mobile device requesting, from a base station, an allocation of cellular frequency channels from the available cellular frequency channels;
   responsive to the requesting, the mobile device receiving an allocation from the available cellular frequency channels;
   bonding a short-range radio channel with the allocated cellular frequency channels, thus increasing available bandwidth for data communication between the mobile station and the base station; and
   transmitting data to the base station in parallel over the bonded short-range radio channel and the allocated cellular frequency channels.

2. (Rejected) The method of claim 1, wherein said transmitting includes the mobile device transmitting, at a given point in time, a first portion of data on the allocated cellular frequency channels and a second portion of the data on the short-range radio channel.

3. (Rejected) The method of claim 2, wherein the short-range radio channel is Bluetooth or WLAN (802.11x).

4. (Rejected) The method of claim 2, further comprising the mobile device dynamically discovering a plurality of available radio channels including the short-range radio channel.

5-6. (Canceled)

7. (Rejected) The method of claim 2, further comprising the mobile device scanning an ambient radio environment using a parallel set of sniffer circuits.

8-14. (Canceled)

15. (Rejected) The method of claim 1, further comprising the mobile device transmitting cellular packet data conforming to one of the following protocols; cellular digital packet data (CDPD) (for AMPS, IS-95, and IS-136), General Packet Radio Service (GPRS) and EDGE (Enhanced Data for Global Evolution).

16. (Rejected) A mobile device comprising:

a reconfigurable processor core including one or more processing units, at least one of the processing units configured to calculate a number of cellular frequency channels to request from a base station for transmission of a file from the mobile device, wherein the number of requested cellular frequency channels corresponds to the size of the file;

a long-range transceiver coupled to the processing units, the long-range transceiver configured to communicate over a plurality of cellular frequency channels;

a short-range transceiver coupled to the processing units and configured to communicate over a short-range radio channel;

a radio frequency sniffer coupled to at least one of the transceivers wherein the radio frequency sniffer is configured to provide signals used to dynamically discover available radio channels including the short-range radio channel; and

a circuit configured to bond the short-range radio channel with one or more of the plurality of cellular frequency channels, thus increasing a bandwidth of data communication between the mobile device and the base station;

wherein the long-range transceiver and the short-range transceiver are configured to transmit respective portions of the file to the base station in parallel over the bonded short-range radio channel and one or more of the plurality of cellular frequency channels allocated by the base station.

17. (Rejected) The mobile device of claim 16, wherein the reconfigurable processor core includes a plurality of digital signal processors (DSPs).

18. (Rejected) The mobile device of claim 17, wherein the reconfigurable processor core includes one or more reduced instruction set computer (RISC) processors.

19. (Rejected) The mobile device of claim 16, further comprising a router coupled to the one or more processing units.

20. (Canceled)

21. (Rejected) The mobile device of claim 16, wherein the reconfigurable processor core comprises an integrated circuit formed on a single substrate including the one or more processing units, the long-range transceiver, and the short-range transceiver.

22. (Canceled)

23. (Rejected) The mobile device of claim 16, wherein the reconfigurable processor core is configured to calculate the number of channels to be used for the transmission based upon a user request.

24. (Rejected) The method of claim 1, further comprising the mobile device receiving from a user of the mobile device, a request for a bandwidth sufficient to communicate at least one file.

25. (Rejected) The method of claim 24, further comprising the mobile device determining a number of channels for the allocation request based on the size of the at least one file.

26. (Rejected) The method of claim 1, wherein said bonding is performed responsive to a request from a user of the mobile device.

27. (Rejected) The method of claim 1, wherein the requested allocation includes a preference for adjacent cellular frequency channels.

28. (Rejected) A mobile communication device comprising:

a radio frequency sniffer unit configured to detect available cellular frequency channels and short-range radio channels;

a processing unit configured to request, from a base station, an allocation of one or more of the available cellular frequency channels;

a long-range transceiver and a short-range transceiver both coupled to the processing unit and configured to communicate over the cellular frequency channels and the short-range radio channels, respectively; and

a circuit coupled to the long-range transceiver and the short-range transceiver and configured to bond one or more available short-range radio channels with one or more allocated cellular frequency channels, thus increasing a bandwidth of data communication between the mobile communication device and the base station;

wherein the long-range transceiver and a short-range transceiver are further configured to transmit data to the base station in parallel over the one or more bonded short-range radio channels and the one or more allocated cellular frequency channels.

29. (Rejected) The mobile communication device of claim 28, wherein the long-range transceiver and a short-range transceiver are further configured to concurrently transmit data to the base station over both the one

or more bonded short-range radio channels and the one or more allocated cellular frequency channels.

30. (Rejected) A mobile communication device comprising:

first means for requesting, from a base station, an allocation of available cellular frequency channels;

second means for bonding a short-range radio channel with allocated cellular frequency channels to increase available bandwidth for data communication between the mobile communication device and the base station; and

third means for transmitting data to the base station in parallel over the bonded short-range radio channel and the allocated cellular frequency channels.

31. (Rejected) The mobile communication device of claim 30, further comprising fourth means for sniffing for available cellular frequency channels.

32. (Rejected) The mobile communication device of claim 30, wherein said third means is configured to transmit, in parallel, data from the mobile communication device to the base station using the one or more bonded short-range radio channels and the one or more allocated cellular frequency channels.

CLAIMS SUPPORT AND DRAWING ANALYSIS APPENDIX

The following lists claims 1, 2, 16, 28, and 29, and indicates where each limitation is supported.

1. A method, comprising: **{e.g., Fig. 2B}**

a mobile device sniffing for available cellular frequency channels; **{e.g., specification page 5, par. [0041]; Fig. 2b, ref # 315}**

the mobile device requesting, from a base station, an allocation of cellular frequency channels from the available cellular frequency channels; **{e.g., specification page 5, par. [0042]; Fig. 2b, ref # 316}**

responsive to the requesting, the mobile device receiving an allocation from the available cellular frequency channels; **{e.g., specification page 5, par. [0042]; Fig. 2b, ref # 318}**

bonding a short-range radio channel with the allocated cellular frequency channels, thus increasing available bandwidth for data communication between the mobile station and the base station; and **{e.g., specification page 5, par. [0042];}**

transmitting data to the base station in parallel over the bonded short-range radio channel and the allocated cellular frequency channels. **{e.g., specification page 5, par. [0040], [0042]; Fig. 2b, ref # 324}**

2. The method of claim 1, wherein said transmitting includes the mobile device transmitting, at a given point in time, a first portion of data on the allocated cellular frequency channels and a second portion of the data on the

short-range radio channel. **{e.g., specification page 4, par [0030]; page 5, par. [0040]}**

16. A mobile device comprising: **{e.g., specification page 1, par. [0009], page 2, par. [0021]; Fig. 3, ref # MS}**

a reconfigurable processor core including one or more processing units, at least one of the processing units configured to calculate a number of cellular frequency channels to request from a base station for transmission of a file from the mobile device, wherein the number of requested cellular frequency channels corresponds to the size of the file; **{e.g., specification page 1, par. [0008]; page 3, par [0029]; Fig. 2A, ref #150}**

a long-range transceiver coupled to the processing units, the long-range transceiver configured to communicate over a plurality of cellular frequency channels; **{e.g., specification page 1, par. [0009]; page 3, par [0027]; Fig. 2A ref # 110}**

a short-range transceiver coupled to the processing units and configured to communicate over a short-range radio channel; **{e.g., specification page 3, par. [0024], [0027]; Fig. 2A ref # 130}**

a radio frequency sniffer coupled to at least one of the transceivers wherein the radio frequency sniffer is configured to provide signals used to dynamically discover available radio channels including the short-range radio channel; and **{e.g., specification page 3, par. [0024], [0028]; Fig. 2A ref # 111}**

a circuit configured to bond the short-range radio channel with one or more of the plurality of cellular frequency channels, thus

increasing a bandwidth of data communication between the mobile device and the base station; **{e.g., specification page 3, par. [0030]; Fig. 2A ref # 190}**

wherein the long-range transceiver and the short-range transceiver are configured to transmit respective portions of the file to the base station in parallel over the bonded short-range radio channel and one or more of the plurality of cellular frequency channels allocated by the base station. **{e.g., specification page 3, par. [0030]; page 4, par. [0040], [0042]}**

28. A mobile communication device comprising: **{e.g., specification page 1, par. [0009], page 2, par. [0021]; Fig. 3, ref # MS}**

a radio frequency sniffer unit configured to detect available cellular frequency channels and short-range radio channels; **{e.g., specification page 3, par. [0024], [0028]; Fig. 2A ref # 111}**

a processing unit configured to request, from a base station, an allocation of one or more of the available cellular frequency channels; **{e.g., specification page 1, par. [0008]; page 3, par [0029]; Fig. 2A, ref #150}**

a long-range transceiver and a short-range transceiver both coupled to the processing unit and configured to communicate over the cellular frequency channels and the short-range radio channels, respectively; and **{e.g., specification page 1, par. [0009]; page 3, par [0024, [0027]; Fig. 2A ref # 110, 130}**

a circuit coupled to the long-range transceiver and the short-range transceiver and configured to bond one or more available short-range radio channels with one or more allocated cellular

frequency channels, thus increasing a bandwidth of data communication between the mobile communication device and the base station; **{e.g., specification page 3, par. [0030]; Fig. 2A ref # 190}**

wherein the long-range transceiver and a short-range transceiver are further configured to transmit data to the base station in parallel over the one or more bonded short-range radio channels and the one or more allocated cellular frequency channels. **{e.g., specification page 3, par. [0030]; page 4, par. [0040], [0042]}**

29. The mobile communication device of claim 28, wherein the long-range transceiver and a short-range transceiver are further configured to concurrently transmit data to the base station over both the one or more bonded short-range radio channels and the one or more allocated cellular frequency channels. **{e.g., specification page 4, par [0030]; page 5, par. [0040]}**

30. A mobile communication device comprising: **{e.g., specification page 1, par. [0009], page 2, par. [0021]; Fig. 3, ref # MS}**

first means for requesting, from a base station, an allocation of available cellular frequency channels; **{e.g., specification page 1, par. [0008]; page 3, par [0029]; Fig. 2A, ref #150}**

second means for bonding a short-range radio channel with allocated cellular frequency channels to increase available bandwidth for data communication between the mobile communication device

and the base station; and **{e.g., specification page 3, par. [0030]; Fig. 2A ref # 190}**

third means for transmitting data to the base station in parallel over the bonded short-range radio channel and the allocated cellular frequency channels. **{e.g., specification page 3, par. [0030]; page 4, par. [0040], [0042]; Fig. 2A, ref 190 and 111}**

MEANS OR STEP PLUS FUNCTION APPENDIX

30. A mobile communication device comprising: **{e.g., specification page 1, par. [0009], page 2, par. [0021]; Fig. 3, ref # MS}**

first means for requesting, from a base station, an allocation of available cellular frequency channels; **{e.g., specification page 1, par. [0008]; page 3, par [0029]; Fig. 2A, ref #150}**

second means for bonding a short-range radio channel with allocated cellular frequency channels to increase available bandwidth for data communication between the mobile communication device and the base station; and **{e.g., specification page 3, par. [0030]; Fig. 2A ref # 190}**

third means for transmitting data to the base station in parallel over the bonded short-range radio channel and the allocated cellular frequency channels. **{e.g., specification page 3, par. [0030]; page 4, par. [0040], [0042]; Fig. 2A, ref 190 and 111}**

31. The mobile communication device of claim 30, further comprising fourth means for sniffing for available cellular frequency channels. **{e.g., specification page 3, par. [0024], [0028]; Fig. 2A ref # 111}**

32. The mobile communication device of claim 30, wherein said third means is configured to transmit, in parallel, data from the mobile communication device to the base station using the one or more bonded short-range radio channels and the one or more allocated cellular frequency

channels. **{e.g., specification page 3, par. [0030]; page 4, par. [0040], [0042]; Fig. 2A, ref 190 and 111}**

EVIDENCE APPENDIX

No evidence submitted under 37 CFR §§ 1.130, 1.131 or 1.132 or otherwise entered by the Examiner is relied upon in this appeal.

RELATED CASES APPENDIX

No final or significant interlocutory decisions for related cases identified in the related cases section of this appeal have been received by Appellant.

CONCLUSION

For the foregoing reasons, it is submitted that the Examiner's rejection of claims 1-4, 7, 15-19, 21, and 23-32 was erroneous, and reversal of his decision is respectfully requested.

The Commissioner is authorized to charge the appeal brief fee of $540.00 and any other fees that may be due to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/6057-60300.

Applicant has petitioned herewith for what is believed to be the appropriate extension of time. If any further extensions are necessary to prevent the above-referenced application from becoming abandoned, Applicant hereby petitions for such extension.

Respectfully submitted,

Date: May 18, 2009

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